

REMARKS

Status of the Claims

Claims 1 and 4-9 are pending in the application. Claim 1 is currently amended. Reconsideration and allowance of all of the pending claims is respectfully requested.

New matter is not being added to the application as filed. The "backbone structure" amendment to claim 1 is supported at paragraph [0018] of the specification. The amount of diisocyanate amendment to claim 1 is supported at paragraph [0022] of the specification. Paragraph [0022] expressly states that an additional elastomer (see paragraph [0021]) that can be used in combination with the diisocyanate can be present at 0 to 40 parts by weight of the total elastomer. Thus, the diisocyanate can be present in amounts greater than 60% as recited in claim 1. Accordingly, no new matter is added and entry of this amendment is respectfully requested.

Examiner Interview

Applicants thank the Examiner for the courtesy of a telephone interview on October 31, 2007. The Examiner's remarks made during the interview have been incorporated into this reply.

Claim Rejections - 35 U.S.C. §103

Claims 1 and 4-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ichikawa '325 (U.S. Patent No. 6,582,325). Applicants respectfully traverse this rejection for the following reasons.

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP §2143.03. Applicants submit that the prior

art does not disclose the backbone structure, or the amount of cycloaliphatic diisocyanate recited in claim 1. Accordingly, it is respectfully submitted that claims 1 and 4-9 are presently allowable over the prior art and that this rejection must be withdrawn.

1. Backbone structure of the polyurethane molecule

Applicants have amended claim 1 to expressly recite that the dicyclohexylmethane-4,4''-diisocyanate recited in claim 1 is contained in the backbone structure of the polyurethane molecule. Claim 1 thus clearly distinguishes Ichikawa '325. In Ichikawa '325, the diisocyanate is present in the side chains and not in the backbone of the polymer.

This was also shown by **Exhibit 1**, filed with the last reply. Exhibit 1 filed with the last reply clearly shows that Ichikawa '325, discloses urethane molecules which do not contain alicyclic diisocyanate, but are modified or crosslinked by the alicyclic diisocyanate. Applicants respectfully maintain that Ichikawa '325 uses a different material. The cover resin of Ichikawa '325 is a reaction product of the thermoplastic polyurethane elastomer with dicyclohexylmethane-4,4''-diisocyanate (see, e.g., claim 1 of the reference). In contrast, the present invention does not use this reaction product. Accordingly, all of the limitations of claim 1 are not disclosed or suggested by Ichikawa '325 and the Examiner has not established a *prima facie* case of obviousness of the present claims.

However, even assuming *arguendo* that the Examiner has established a *prima facie* case of obviousness of the present invention, applicants submit that the present invention exhibits unexpected results over the prior art. This was demonstrated by **Exhibit 2** submitted with the last Reply. Exhibit 2 submitted with the last Reply shows that the cover of the Ichikawa '325 golf

ball is different from the cover of the golf ball of the present invention. The Ichikawa '325 cover shows poor scuff resistance in comparison with the presently claimed golf ball cover. Accordingly, applicants submit that the patentability of the present claims is well demonstrated, and this rejection should be withdrawn.

2. Amount of cycloaliphatic diisocyanate

Applicants respectfully submit that Ichikawa '325 does not disclose or suggest cycloaliphatic diisocyanate base resin present in an amount greater than 60% by weight based on the total weight of the elastomer as presently recited in claim 1. However, Ichikawa '325 does not disclose or suggest cycloaliphatic diisocyanate in their compositions in the amounts presently claimed. Ichikawa '325 clearly states as follows at col. 3, lines 52-62 (emphasis supplied):

Dicyclohexylmethane-4,4"-diisocyanate is preferably blended with the thermoplastic polyurethane elastomer (1) in such amounts that 0.05 to 10 parts, more preferably 0.2 to 5 parts, most preferably 0.2 to 5 parts of dicyclohexylmethane-4,4"-diisocyanate is present per 100 parts by weight of the thermoplastic polyurethane elastomer. On this basis, less than 0.05 part of the diisocyanate would induce insufficient crosslinking reaction and little improvements in physical properties. More than 10 parts of the diisocyanate would give the reaction product which experiences substantial yellowing with time, heat and ultraviolet radiation, and loses thermoplastic properties and resilience.

Thus, Ichikawa '325 makes clear that the cycloaliphatic diisocyanate (dicyclohexylmethane-4,4"-diisocyanate) is not contained in their compositions in amounts greater than 10 parts per weight of the overall polyurethane composition. Ichikawa '325 then expressly teaches away from including the dicyclohexylmethane-4,4"-diisocyanate in amounts greater than 10 parts per 100 parts by weight of the overall elastomer composition at col. 3, lines 59-62.

Present claim 1 requires that the cycloaliphatic diisocyanate be present in the cover composition in amounts greater than 60%. Accordingly, it cannot be maintained that Ichikawa '325 discloses or suggests this limitation of claim 1. Furthermore, since Ichikawa '325 teaches away from using amounts of dicyclohexylmethane-4,4"-diisocyanate greater than 10%, there is no suggestion to use diisocyanate in the amounts presently claimed. See MPEP §2145(X)(D). Applicants respectfully submit that the pending rejection must therefore be withdrawn. An early reconsideration and Notice of Allowance is respectfully requested.

CONCLUSION

In view of the above remarks, it is believed that claims are allowable.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact Mark J. Konieczny, Reg. No. 47,715, at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37.C.F.R. §§1.16 or 1.14; particularly, extension of time fees.

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Respectfully submitted,

By 

Andrew D. Meikle

Registration No.: 32,868

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road

Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant